

Amendments To The Specification:

In the English translation document, please delete the term --Description--at page 1 line 1, before the title.

In the English translation document, please amend the title at page 1 line 3, as follows:
Turbine and ~~stationary-blade~~ a turbine vane for a turbine

In the English translation document, please add the paragraph at page 1 line 4, after the title, as follows:

--CROSS REFERENCE TO RELATED APPLICATIONS

This application claims priority to German application No. 10249211.5 DE, filed October 22, 2002, and to European application No. 03007140.1 EP, filed March 28, 2003, both applications are incorporated by reference herein in their entirety.--

In the English translation document, please add the section heading at page 1 line 4, after the newly added CROSS REFERENCE TO RELATED APPLICATIONS section, as follows:

--FIELD OF INVENTION--

In the English translation document, please amend the paragraph at page 1 lines 5-7 as follows:

The present invention relates to a ~~stationary-blade~~ turbine vane for a turbine ~~according to the precharacterizing clause of Claim 1~~ and a turbine ~~according to the precharacterizing clause of Claim 9~~.

In the English translation document, please add the section heading at page 1 line 8, as follows:

--BACKGROUND OF INVENTION--

In the English translation document, please amend the paragraph at page 1 lines 9-15 as follows:

Cooled ~~stationary blades~~ turbine vane for turbines are generally known. The ~~stationary blades~~ turbine vanes have a hollow sectional element at the end of which there is a transverse platform. An inset serving as a cooling baffle is accommodated in the hollow sectional element a certain distance from the inside of the outer wall and is provided with a large number of cooling openings. The coolant flows through the openings and hits the inside of the outer wall, thereby cooling it.

In the English translation document, please add the section heading at page 1 line 29, as follows:

--SUMMARY OF INVENTION--

In the English translation document, please amend the paragraph at page 1 lines 30 to page 2 line 4 as follows:

The object of the present invention is to specify a ~~stationary blade~~ turbine vane that will prevent mechanical damage to a turbine during operation.

This object is achieved by the features of Claim 1 in the case of the ~~stationary blade~~ turbine vane and by the features of Claim 9 in the case of the turbine. Other advantageous embodiments of the invention are specified in the subclaims.

In the English translation document, please amend the paragraph at page 2 lines 6 to 11, as follows:

The solution is based on the knowledge that the particles in the coolant tend to deposit themselves on the inner surface of the inset in areas where the flow rate is greatly reduced and where the coolant is flowing at slower speeds. The corresponding areas of the outer wall of the ~~stationary blade~~ turbine vane are therefore zones with considerably reduced cooling, which then exhibit mechanical damage.

In the English translation document, please amend the paragraph at page 3 lines 3 to 6, as follows:

The recess is particularly easy to produce when the ~~stationary-blade~~ turbine vane is cast if this recess is designed as a platform penetration. The platform penetration is then closed from the outside by a cover plate.

In the English translation document, please amend the paragraph at page 3 line 18, as follows:

The ~~stationary-blade~~ turbine vane is preferably used in a turbine.

In the English translation document, please add the section heading at page 3 line 19, as follows:

--BRIEF DESCRIPTION OF THE DRAWINGS--

In the English translation document, please amend the paragraph at page 3 lines 23 to 24, as follows:

Fig. 2 shows a cross-section through a ~~stationary-blade~~ turbine vane of a turbine

In the English translation document, please add the section heading at page 3 line 25, as follows:

--DETAILED DESCRIPTION OF INVENTION--

In the English translation document, please amend the paragraph at page 3 line 26 to page 4 line 10, as follows:

Fig. 1 shows a longitudinal section of a gas turbine 1. Inside, it has a rotor 3 on bearings that allow it to spin about its axis of rotation 2. Arranged along the rotor are an intake casing 4, a compressor 5, an ~~toroidal~~ annular combustion chamber 6 with several coaxially arranged burners 7, a turbine 8

and the waste gas casing 9. The combustion chamber 6 forms a combustion area 17 that communicates with an annular hot gas duct 18. Four turbine stages 10 arranged one after the other form the turbine 8. Each turbine stage 10 comprises two rings of blades. In the direction of flow of a working medium 11, a row 14 of rotor blades 15 follows a row of ~~stationary-blades~~

turbine vanes 13 in the hot gas duct 18. The ~~stationary blades~~ turbine vanes 12 are attached to the stator 13, whereas the rotor blades 15 of one row 14 are attached to the rotor 3 by means of a turbine disk 19. Coupled to the rotor 3 is a generator or a driven machine (not shown).

In the English translation document, please amend the paragraph at page 4 lines 12 to 21, as follows:

During operation of the gas turbine 1, air 16 is drawn in through the intake casing 4 and compressed by the compressor 5. The compressed air made available at the turbine end of the compressor 5 is fed to the burners 7 where it is mixed with a fuel. The mixture is then burned in the combustion chamber 17, forming the working medium 11. From there, the working medium 11 flows along the hot gas duct 18 past the ~~stationary blades~~ turbine vanes 12 and the rotor blades 15. At the rotor blades the working medium 11 expands, sending a pulse that causes the rotor blades 15 to drive the rotor 3 and the rotor 3 to drive the connected machine.

In the English translation document, please amend the paragraph at page 4 lines 23 to 29, as follows:

The components exposed to the hot working medium 11 are subject to enormous thermal loads during operation of the gas turbine 1. The ~~stationary blades~~ turbine vanes 12 and the rotor blades 15 of the first turbine stage 10 in the direction of flow of the working medium 11 are exposed to the greatest thermal stress, along with the thermal shield stones cladding the combustion chamber 6. To withstand the temperatures there, they are cooled with a coolant K.

In the English translation document, please amend the paragraph at page 4 line 31 to page 5 line 8, as follows:

Fig. 1 shows a section through the partially depicted ~~stationary blade~~ turbine vane 12 of the turbine 8. The ~~stationary blade~~ turbine vane 12 has a sectional element 22, at the head end of which is a platform 23. The foot end of the ~~stationary blade~~ turbine vane 23 with the second platform on it is not shown. The sectional element area 37 is located between the two platforms. In the direction of flow of the working medium 11, the sectional element 22 stretches from a round in-flow edge 25 to a pointed out-flow edge 26. In the area of the out-flow edge 26 the

~~stationary blade~~ turbine vane 12 has a slit 41 running from the foot end to the head end in which round turbulators 27 are arranged.

In the English translation document, please amend the paragraph at page 6 lines 21 to 31, as follows:

Cooling air as the coolant K is supplied to the ~~stationary blade~~ turbine vane 12 through the foot end and forwarded to the inside of the inset 20. From here the cooling air flows out at a higher speed through the baffle cooling openings 29 of the inset 20 and hits the inside 28 of the outer wall 40. The outer walls 40 running between the in-flow edge 25 and the out-flow edge 26 are impact-cooled in the area of the inset 20. The cooling air then flows more or less parallel to the flow of the working medium 11 in the direction of the out-flow edge 26. The coolant K is swirled by the turbulators 27, which increases the convective cooling effect of the coolant K. The coolant K exits through the slit 41.

In the English translation document, please amend the paragraph at page 7 lines 21 to 29, as follows:

Located in the base area 30 of the section 23 are the recesses 24 in a relatively protected area, referred to the hot working medium 11. This area is therefore exposed to lower temperatures than the sectional element 22, so the reduced cooling effect due to the lower cooling air flow rates is adequate there. In the transition area 36 from the in-flow edge 25 to the platform 23 the flow rates for the cooling air are still much higher than in the sectional element area 37 of the ~~stationary blade~~ turbine vane 12. The transition area is therefore also guaranteed adequate cooling.